

## REMARKS/ARGUMENTS

### *Status of Claims*

Claim 1 is currently amended.

Claims 9-15 were previously canceled.

Claim 28 is new.

Claims 1-8 and 16-28 are pending in the application.

Applicants hereby request further examination and reconsideration of the presently claimed application.

### *Claim Rejections – 35 U.S.C. § 103*

Claims 1-3, 7-8, 16-23, and 26-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goda, et al., U.S. Patent No. 5,132,140 (hereinafter “*Goda*”) in view of Faur, et al., U.S. Patent No. 6,613,697 (hereinafter “*Faur*”). Claims 4-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Goda* taken with *Faur* as applied to claims 1-3, 7-8, 16-23, and 26-27 and further in view of Zhao, et al., U.S. Patent Publication No. 2003/0118064 (hereinafter “*Zhao*”). Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Goda* taken with *Faur* as applied to claims 1-3, 7-8, 16-23, and 26-27 and further in view of Liang, et al., U.S. Publication No. 2002/0173170 (hereinafter “*Liang*”). Claim 2-8 and 16-27 depend from claim 1. Thus the pending claims stand or fall on the application of the cited references to independent claim 1. As noted by the United States Supreme Court in *Graham v. John Deere Co. of Kansas City*, an obviousness determination begins with a finding that “the prior art as a whole in one form or another contains all” the elements of the claimed invention. *See Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 22 (U.S. 1966).

Applicants respectfully submit that the cited references in combination do not contain every limitation set forth in the pending claims, and therefore do not render as obvious the instant claims.

Applicants have amended claim 1 to recite:

A method for depositing an inorganic material from a reactive solution onto a substrate, comprising:  
chemically treating said substrate to activate growth of said inorganic material;  
immersing said substrate into said reactive solution;  
**using a monitoring process to determine when said reactive solution becomes depleted;** and  
regenerating said reactive solution to allow for continuous growth of said inorganic material onto said substrate **wherein the monitoring process comprises pH measurements, spectrographic analysis, or both.**

Support for this amendment can be found in paragraph [0023] of the instant application. Similar limitations are recited in claim 24 of the instant application. Applicants note the rejection of pending claim 24 on the basis of *Liang*'s disclosure of an automatic solution monitoring system. However, *Liang* is silent as to Applicants' limitation of ***wherein the monitoring process comprises pH measurements, spectrographic analysis, or both***. In consideration of the foregoing, Applicants respectfully submit the pending claims are patentable over the cited references and in condition for allowance.

### ***New Claims***

New claim 28 recites novel and nonobvious aspects of the Applicant's claimed subject matter. Claim 28 recites:

A method for depositing an inorganic material from a reactive solution onto a substrate, comprising:  
chemically treating said substrate to activate growth of said inorganic material;  
immersing said substrate into said reactive solution, **wherein said reactive solution is not heated;** and  
regenerating said reactive solution to allow for continuous growth of said inorganic material onto said substrate. (Emphasis added)

Support for claim 28 can be found in Figures 1 and 2 and in paragraphs [0010] and [0016]-[0020] of the instant application which illustrate and disclose a method for low temperature growth of inorganic materials (e.g., non-heated). Applicants note in contrast, the primary reference *Goda* discloses:

In accordance with the present invention, there is provided a process for depositing a silicon dioxide film on a substrate which comprises preparing a hydrosilicofluoric acid solution substantially saturated with silicon dioxide at a temperature of not higher than 0 °C, **elevating the temperature of the substantially saturated solution to a temperature between 25 °C and 70 °C** thereby forming a hydrosilicofluoric acid solution supersaturated with silicon dioxide, **and immersing a substrate in the supersaturated solution at that temperature** so as to deposit a silicon dioxide film onto the surface of the substrate.

*See Goda*, column 3, lines 23-35, emphasis added. Thus *Goda* employs a supersaturated solution that has an elevated temperature and is silent as to a reactive solution at room temperature (e.g., that is not heated). As *Goda*'s methodologies disclose elevation of the temperature of the solution in order to obtain deposition; modification of the reference to carry out the deposition at low temperature or even at a constant temperature as disclosed in the cited secondary references would render the invention of *Goda* inoperable for its intended purpose. The Court of Appeals for the Federal Circuit has held, a *prima facie* case of obviousness cannot be supported if, as a result of the proposed modification to the prior art, the prior art “**would be rendered inoperable for its intended purpose.**” *See In re Gordon*, 221 USPQ at 1127; *see also In re Ratti*, 123 USPQ 349 (CCPA 1959) (If the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious). In consideration of the foregoing, Applicants respectfully submit claim 28 is allowable over the cited prior art.

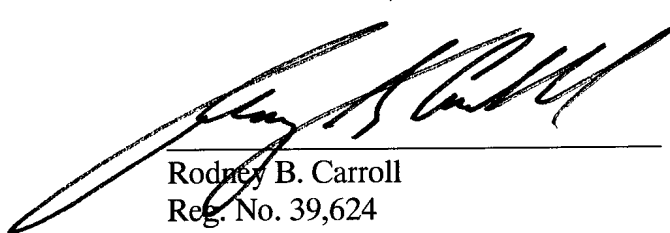
**CONCLUSION**

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections are respectfully requested by Applicants. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Final Office Action dated February 10, 2009 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account Number 50-1515 of Conley Rose, P.C., Texas. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,  
CONLEY ROSE, P.C.

Date: \_\_\_\_\_

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